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PUBLIC HEALTH SERVICE
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CIVIL DEFENSE OFFICIALS OBSERVE TEST REHEARSAL AT NIH ON MAY 22



Dress rehearsal -- simulated casualty.

On May 22 NIH held its final scheduled civil defense rehearsal. On hand to observe the test run were officials of the D. C. and Montgomery County Civil Defense authorities, as well as representatives of local churches, public utilities, and other organizations that will be serving with NIH in the event of an atomic attack.

The visitors seemed greatly impressed with the way our rehearsal was carried out. Dr. W. Palmer Dearing, Deputy Surgeon General, PHS, said in a memo to Dr. Sebrell, "At the NIH civil defense rehearsal on May 22, it was obvious that a great deal of intelligent and hard work had gone into planning, organization, and practice. The cooperative spirit, the alertness, and high morale of the staff was equally apparent.

"Please extend my congratulations to all those responsible for developing the plan, and to all staff members who participated in the various assignments."

We've learned a lot since that first practice in May. We've had to face and solve a great many problems that invariably arise when a large group of people tackles an unfamiliar operation.

There are still many problems that will crop up when we have future practice runs. A policy statement on these runs will be issued within a couple of weeks. As yet the frequency of the runs is undetermined. It is likely, however, that new emergency conditions will be simulated, since we must learn how to operate under any condition, no matter how limited.

A few of us are scheduled to receive additional specialized training during the next few weeks. The rest of us will receive training during future practices and as other needs become apparent.

We've made a good start. We're proving that we are able to carry out the big job we've undertaken and that NIH, if the need arises, will be ready to accept its responsibilities as an emergency hospital.

2200 VISITORS SEE NIH EXHIBIT



\$269,760 worth of equipment was displayed at NIH exhibit.

More than 2,200 persons crowded into Building 13 for NIH's Research Equipment Exhibit May 20-22.

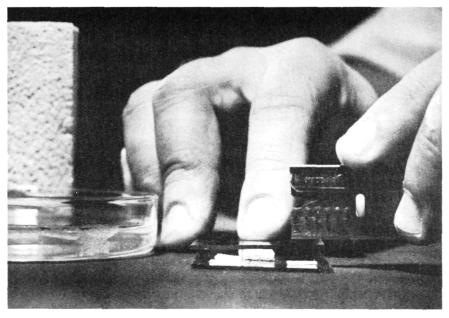
A broad range of research equipment was displayed by approximately 75 manufacturers. Many items were shown for the first time. Among the exhibits were found the latest in electronic, optical, surgical, and radiation equipment; virus and tissue culture equipment; laboratory furniture and glassware.

The exhibit was the second of its kind to be held at NIH. Its primary purpose was to acquaint Washington area scientists with the most modern research tools and to give them an opportunity to discuss equipment problems with representatives of the industry.

The exhibit, which was open to the public, attracted many people from nearby medical schools, hospitals, universities, and government installations.

New Method for Tissue Culture

No. 72 of a Series



The first step in the sponge matrix method for tissue culture. A strip of sponge is compressed between two glass slides and a thin slice is cut from it, using an ordinary razor blade.

A new technique for growing cancer cells outside the body in the form of recognizable tissues may provide a new tool for the study of human cancer.

This technique, known as the "sponge matrix method," was developed in the last year by Dr. Joseph Leighton, head of the Short Term Tissue Culture Unit of NCI's Laboratory of Pathology.

A unique and especially advantageous feature of the method is that it utilizes ordinary cellulose sponge as a support for cell and tissue growth. Cells growing from the original tissue fragment invade the framework of the sponge, where they form organized aggregates of cells resembling the tissue pattern present in the living animal.

In the preparation of a culture by the Leighton technique, several fragments of living tissue, along with liquid plasma and other nutrients, are placed on the surface of a thin slice of sponge in a test tube. When the plasma clots, it attaches the tissue to the sponge. After incubation for one to three weeks, the sponge culture is removed from the tube and microscope slides prepared from it. The sponge-grown tissue can be sectioned, stained, and studied with the same methods

used in examining tissues from the body.

Most tissues studied by this method have been of animal origin--such as breast carcinoma, malignant melanoma and sarcoma from the mouse, and ovarian carcinoma from the rat. Applying the technique to studies of human cancer, Dr. Leighton has cultivated a malignant melanoma and a chondrosarcoma.

Future studies with the sponge technique will be along two lines. One is a survey of the growth patterns produced in the sponge by a variety of human cancers. When criteria have been developed for patterns produced by the various kinds of tissue, the technique may be useful in the diagnosis of some obscure types of cancer.

A second line of research will be a study of the factors involved in the destructive spread of cancer. This can be accomplished by placing normal and malignant tissue side-by-side on one sponge, enabling studies of how cancerous tissue invades normal tissue. Studies with the sponge technique may also show how drugs, hormones, and X-ray directly affect tumor tissues.

Here and There

Honors

Dr. Evelyn Anderson of NIAMD's Laboratory of Biochemistry and Nutrition presented June 8 the Alice Woolley Memorial Lecture at the American Medical Women's Association meeting in Chicago. The subject of her lecture was "The Brain as a Regulator of Metabolism."

Dr. Floyd S. Daft, Associate Director of NIAMD, was given the honorary degree of Doctor of Science on June 1 by Simpson College, Indianola, Iowa, where he received his B. A. degree.

Hospitalization

NIH went over the top in its recent drive for members for Group Hospitalization and Surgical Service plans. The new contracts were effective in May.

Shorthand Class

Seventeen members of the shorthand class held recently at NIH have been awarded certificates for achieving the 80 words per minute requirement. They are Dorothy Allison, Ida L. Blagg, Nancy J. Butler, George W. Cornwall, Eileen A. Dowd, Miriam S. Frank, Naomi G. Grimme, Rosalie M. Kasaba, Loretta A. Kelly, Marjorine M. King, Patricia L. Kirby, Jane Lamborn, Dorothy G. Mathews, Margaret P. Monday, Helen W. Garrett, Cornelia Walker, Vera White, and Rose L. Wolitsky.

New PHS Bureau Chief

Dr. Otis L. Anderson has been appointed Chief of the Bureau of State Services, succeeding Dr. Joseph W. Mountin, who died suddenly on April 26. Dr. Anderson is a former associate chief of the Bureau of Medical Services.

Dr. Scheele Abroad

Surgeon General Scheele has been in Geneva, Switzerland, attending the Fifth World Health Assembly. He served at the Assembly as Chairman of the United States Delegation.

NIH BRIGHTENED AS PAINTERS PLY BRUSHES

If in the spring young men think of love, women's thoughts as surely turn to housecleaning and redecorating. No less an authority than Joseph Powell, who heads NIH's Paint Shop, can vouch for this fact.

The technique of matching colors on different surfaces is the height of the painter's art and takes years to perfect. At NIH, the Paint Shop purchases white paint in bulk, and small quantities of dark pigments, so they are able to mix any desired color in the shop.

The Paint Shop is equipped to take care of all kinds of work, including interior painting, decorating, glazing, and furniture finishing. They also paint or finish everything made in the Carpenter Shop.

Although the buildings now under construction at NIH are painted under contract, they will be added to the Paint Shop's list for maintenance. Exterior painting which requires scaffolding is also done on contract. The outside entrances to the buildings, however, are painted annually by the shop.

Mr. Powell, who joined the National Institute of Health staff in 1937, has seen NIH grow much faster than the number of painters in his shop. Without a good crew of men, the job would be too much to handle. One of the problems his painters face is working around the expensive scientific equipment in the laboratories.

The Paint Shop is now in its fifth location, according to Mr. Powell. They will move once more from Building 12 to their permanent quarters in Building 13. There they will have more space and better equipment. Now, at times, the whole shop is jammed with items to be painted or refinished.

Mr. Powell says his men are always ready to take on any painting job at NIH, but one he would prefer to skip is painting the flagpole in front of Building 1.

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N9H Spotlight



Lewis Aronow

It isn't easy to hold a full-time job and go to school at night, but many NIH employees do just that. One of these is Lewis Aronow of the Chemical Pharmacology Section, NIH.

Mr. Aronow is a chemist-technician during the day and a Georgetown University graduate student at night. He will receive his Master's Degree in biochemistry this month and plans to continue his studies toward a Ph.D.

At NIH Lew assists Dr. B. B. Brodie in his investigations to determine how the body metabolizes certain chemical compounds. The purpose of these studies is to develop therapeutic agents for use in cardiovascular disease.

In his job Lew performs a variety of duties from chemical analysis to animal surgery. His particular problem is a study of certain drugs that block the effects of adrenalin.

Born in New York City in 1927, Lew attended City College there. Before Uncle Sam called, he had worked his way through two years of college by an assortment of occupations. He was a night watchman for a while, a telephone operator, and even tried his hand at managing a pool hall.

Lew spent two years in the infantry, serving in Italy, Austria, and Germany. He graduated from City College after his stint in the Army.

Lew has been with NIH for two years. He feels his job offers him a good deal of experience and training in his chosen profession that couldn't be gotten in the classroom. His work at NIH and Georgetown University thus serve to complement each other.

CIVIL DEFENSE BOOKS AVAILABLE IN LIBRARY

The NIH library has collected a selected group of books on civil defense against atomic attack.

Some of the books draw upon British experience in World War II and provide valuable background material. Other books provide upto-date information on survival under atomic attack.

Among the collection may be found "After the A Bomb; Emergency Care in Atomic Warfare," "Civil Defense in Modern War," "Effects of Atomic Weapons," "Chicago Alerts; A City Plans Its Civil Defense Against Atomic Attack," and "United States Civil Defense."

A 50-page booklet "Outline of the Role of the National Institutes of Health in the Emergency Plan for Civil Defense of the District of Columbia" is included in the collection.

This group of books should be useful to participants in NIH's civil defense program. The collection has been placed on a special bookshelf in the main reading room of the library.

NIH PHOTO SECTIONS CONSOLIDATED MAY 1

On May 1, the Color Reproduction Section and the Photographic Research Section of the Scientific Reports Branch were merged into a single central service unit, designated as the Photographic Section. The new section, headed by Roy Perry, continues to render the services formerly provided by the two photo sections, using their combined space, equipment, and staffs with the exception of R. Donald Reed, who has taken a new assignment on the immediate staff of the Chief, Scientific Reports Branch.

In his new position, Mr. Reed serves as an audio-visual specialist, responsible for motion picture, filmstrip, slide series, radio, TV, and related projects of the Scientific Reports Branch, and assists with the planning and production of audio-visual materials in the various Institutes.

All work orders for photo services should be addressed to the Photographic Section, Room 1415, Building T-6, Ext. 415.

HIGHLIGHTS FROM CIVIL DEFENSE REHEARSAL ON MAY 22



2:05 P.M., May 22.



Name tags are distributed to each volunteer.



Training begins with simulated casualties.



Clinical consultation



Preparing to move patient.



Sorting and tagging patients in triage area.